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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,304	03/29/2001	Alain Brochez	BROC3001/JEK	6723

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EXAMINER

FLANDRO, RYAN M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 07/31/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/806,304

Applicant(s)

BROCHEZ, ALAIN

Examiner

Ryan M Flandro

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: (1) the word “De” at page 8 line 28 should be “The”; (2) the phrase “which are either or not temporary” at page 10 lines 17-18 is nonsensical; (3) the term “phenomenons” at page 2 line 17 is grammatically incorrect; (4) the phrase “that may be supplementary used” at page 2 lines 32-33 is nonsensical; (5) use of the term “infeed” which, although nonsensical, is understood to mean “insert”; and (6) use of the phrase “extend in the respective far ends of the mould” is confusing and inexact. Other informalities exist that are not particularly pointed out here. Appropriate correction is required.

Claim Objections

Claims 1-4, 9, 21, 22, and 28 are objected to because of the following informalities: the word “moulds” should be “molds”.

Claim 1 is further objected to because of the following informalities: the phrase “extend in the respective far ends of the mould” is nonsensical.

Claim 2 is further objected to because of the following informalities: (1) references to several of the features are inconsistent, e.g. feature 34 is referred to as “a part,” an “accompanying oblique part,” and an “oblique part,” and wall 33 is referred to as “the opposite wall” as well as “the inner wall”; (2) features 34 and 40 are both referred to as “parts”; (3) reference to the “infeed corner piece 5-6” in lines 7-8 of the claim should be numbered 4 rather

than 5-6; and (4) the phrase “in an oblique manner as of the accompanying locking means (12)...” is confusing.

Claim 4 is further objected to because of the following informalities: (1) the word “co-operate” in line 4 of the claim should be “cooperate”; and (2) the word “lit)” at line 18 of the claim should be changed to “lip.”

Claim 7 is objected to because of the following informalities: the word “ill” in line 5 of the claim should be deleted.

Claim 13 is objected to because of the following informalities: the word “is” is missing between the words “characteristics” and “met” in line 4 of the claim.

Claim 25 is objected to because of the following informalities: the word “co-operating” should be “cooperating”.

Claim 26 is objected to because of the following informalities: the number 4 in line 4 of the claim should be removed.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 1 also recites the limitation "the mitre" in line 6 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the cavity" in line 5 of the claim, the limitation "the accompanying locking means (12)" in line 6 of the claim, and the limitation "the opposite wall" in line 7 of the claim. There is insufficient antecedent basis for these limitations in the claim.

The term "close to" in line 6 of claim 3 is a relative term which renders the claim indefinite. The term "close to" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 4 recites the limitation "the side (19)" in line 9 of the claim and the limitation "the side (20)" in line 10 of the claim. There is insufficient antecedent basis for these limitations in the claim.

Regarding claim 6, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 7 and 8, the phrase "or such" renders the claim indefinite because it is unclear whether the limitations preceding the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 10 and 11, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

The term "in the order of magnitude of" in the last line of claim 11 is a relative term which renders the claim indefinite. The term "in the order of magnitude of" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 16 recites the limitation "the above-mentioned oblique parts (34)" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "the inner wall (33)" in line 2 of the claim and the limitation "the respective cavities (9-10)" in lines 2-3 of the claim. There is insufficient antecedent basis for these limitations in the claim.

Regarding claim 19, the phrase "in particular" in line 3 of the claim renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 21 recites the limitation "the inner wall (33)" in line 4 of the claim, the limitation "the outer wall (14)" in line 8 of the claim, and the limitation "the cavities (9-10)" in line 8 of the claim. There is insufficient antecedent basis for these limitations in the claim.

The term "the right adjustment and/or positioning" in claim 26 is a relative term which renders the claim indefinite. The term "the right adjustment and/or positioning" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree,

and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The terms "theoretically perfect shape" and "perfect shape" in lines 4 and 7, respectively, of claim 28 are relative terms which render the claim indefinite. The terms "theoretically perfect shape" and "perfect shape" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Regarding claim 28, the phrase "or such" at line 14 renders the claim indefinite because it is unclear whether the limitations preceding the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 28 also recites the limitation "the mitre-sawing" at line 4 of the claim, the limitation "the pressing knives (48)" in line 10 of the claim, the limitation "the notch (15)" in line 14 of the claim, and the limitation "these openings" in the last line of the claim. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9, 12, 13, 15-17, 19, 20, 23, 26, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hustadt et al.(DE 43 05 377). Hustadt shows a corner joint 1 with an

inserted corner piece 5 having two insert parts (bounded by countersurfaces 7 and 8) extending at an angle through the frame profile 3, 4 (See figures 3 and 4). Note that the functional recitation that the “corner joint [is]... characterised in that it is provided with supplementary features which increase the resistance of this corner joint (1) and thus of the mitre as a whole against deformation” has not been given patentable weight because it is in narrative form. In order to be given patentable weight, a functional recitation must be expressed as a “means” for performing the specified function, as set forth in 35 U.S.C. § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. In re Fuller, 1929 C.D. 172; 388 O.G. 279.

With regard to claim 9, Hustadt shows a corner joint 1 with locking means 21-22 operating on the outside of the molds 3-4 and which work in conjunction with the corner piece 5 (See figures 1, 3, and 4). Hustadt also shows said corner piece 5 having a part (see generally legs 26-27 and slanted surface of recess 30-31 in figure 3) which extends slantingly through the cavity of the mold 3-4 from the locking means 21-22 up to the opposite wall of the cavity and which forms a support deeper in the cavity than the locking means 21-22 (see figure 3; column 3 line 26 – column 4 line 6).

With regard to claim 12, Hustadt further shows the above-mentioned part (see generally legs 26-27 in figure 3) made in the shape of a leg.

With regard to claim 13, Hustadt also shows a locking means consisting of lips 21-22 which are pressed in slantingly and thus provide for a tensile force, and that these lips 21-22 are pressed in such that the free end of a lip 21-22 is situated behind the central axis of the oblique part (area situated to the left of displaced material 32-33).

With regard to claim 15, Hustadt shows supplementary features including a combination of parts formed on the infeed corner parts (bounded by countersurfaces 7 and 8) which join at an angle, and means (tongues 21-22 and sloped surface 30-31) for creating a tensile force in said parts (see figure 3; column 3 line 26 – column 4 line 6).

With regard to claim 16, Hustadt further shows that the means for creating the tensile force in the parts 26-27 are formed of the sloped surfaces 30-31 which are connected to the parts 26-27 with their free ends, so that pressure created in the sloped surfaces 30-31 by tongues 21-22 creates a tensile force in parts 26-27 (see figure 3 column 3 line 26 – column 4 line 6).

With regard to claim 17, Hustadt also shows the parts 26-27 situated against the inner wall of the mold cavities 3-4 (see figure 3).

With regard to claim 19, Hustadt clearly shows a free space 25 formed on the outside corner of the corner piece 5 which is free of any massive material (see figures 3 and 4).

With regard to claim 20, Hustadt shows the corner piece 5 having positioning elements (e.g. countersurfaces 26-27 and bridging webs 9-10) to force it in the right position when it is placed in the mold cavities 3-4 (see generally figures 3 and 4).

With regard to claim 23, Hustadt discloses a corner joint 1 with corner piece 5 having its parts (bounded by countersurfaces 7 and 8) made in one piece (see generally figures 3 and 4).

With regard to claims 26 and 27, Hustadt shows supplementary features which consist of the right adjustment and/or positioning and/or combination of several of the components.

Claims 5 and 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kreusel (DE 23 32 890). Kreusel shows a corner joint 20 (see figure 2) with an insert corner

piece 10 having two infeed parts 1-2 which extend at an angle in the respective far ends of the molds 17-18. Kreusel further shows said corner joint 20 having locking means with several upset material parts in the shape of lips which are made by means of slantingly pressed in parts of the molds 17-18, and having supplementary features consisting of stop parts 5-6 situated behind the lips (see figure 2).

With regard to claim 6, Kreusel further shows the stop parts 5-6 are only connected to the rest of the corner piece 10 at their base (see figure 1).

Allowable Subject Matter

Claims 2-4, 7, 8, 10, 11, 14, 18, 21, 22, 24, 25 and 28 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: claim 2 is indicated as allowable because the prior art fails to show infeed parts of a corner joint that have the shape of an arrow point split in the longitudinal direction; claim 3 is indicated as allowable because the prior art fails to disclose an upsetting which is close to the maximally admitted upsetting of the material; claim 4 is indicated as allowable because the prior art fails to disclose triangular notches whereby a side against which the lip is situated is longer than a side over which the free end of the lip is pressed in; claims 7 and 8 are indicated as allowable because the prior art fails to disclose the use of a filling compound on the place of the aforementioned pressed-in lips; claims 10 and 11 are indicated as allowable because the prior art fails to disclose a panel fixed by means of wedges; claim 14 is indicated as allowable because the prior art fails to

show a part made in the shape of a leg which is part of a triangle whose second leg extends against the inside of the cavity and whose third leg forms a link between the first two legs; claim 18 is indicated as allowable because the prior art fails to disclose a corner joint having supplementary features include that the corner joint is predominantly free of parallel surfaces between the corner piece and the outer wall of the cavities except in zones where locking means are mounted; claim 21 is indicated as allowable because the prior art fails to disclose any of the named positioning elements; claim 22 is indicated as allowable because the prior art fails to disclose a space provided in the material behind the inside corner of the corner piece; claim 24 is indicated as allowable because the prior art fails to disclose corner hinge-mounted infeed parts; and, lastly, claim 25 is indicated as allowable because the prior art fails to disclose infeed parts that are hook-shaped on their cooperating far ends and connected to one another by means of a pivot; claim 28 is indicated as allowable because the prior art fails to disclose the application of a filling compound in the notch in which the lips are provided, and in such amount that it is at least partially driven out during the pressing and forming a seal on the openings.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to corner joints and insert corner pieces for realizing such a corner joint:

U.S. Patent 5,485,705 to Guillemet

U.S. Patent 5,473,853 to Guillemet et al.

U.S. Patent 5,433,054 to Langenhorst

U.S. Patent 5,378,077 to Paulsen

EP Patent 0790087 to Hunke

EP Patent 0541117 to Weimar

NL Patent 7213375 to Hueck

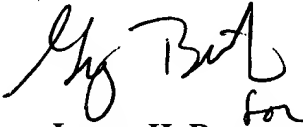
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M Flandro whose telephone number is (703) 305-6952.

The examiner can normally be reached on 8:30am - 5:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Ryan M. Flandro
July 23, 2002


Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3670